COUPEZ
CHIRURGIE VÉTÉRINAIRE

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LUXATING PATELLA

Genetic studies show that patellar luxation is a **developmental** and **hereditary** disease, carrier animals should **not be bred.** In rare cases where patellar luxation is associated with trauma and affects only one limb, the cause may be traumatic.

Surgical intervention is necessary to correct patellar luxation. Surgical correction is indicated to limit the risk of developing **osteoarthritis** or a **cranial cruciate ligament rupture**, a condition that requires surgical treatment. Patients with grade 3 patellar luxation have a 25% chance of developing a cranial cruciate ligament rupture during their lifetime.

SURGERY

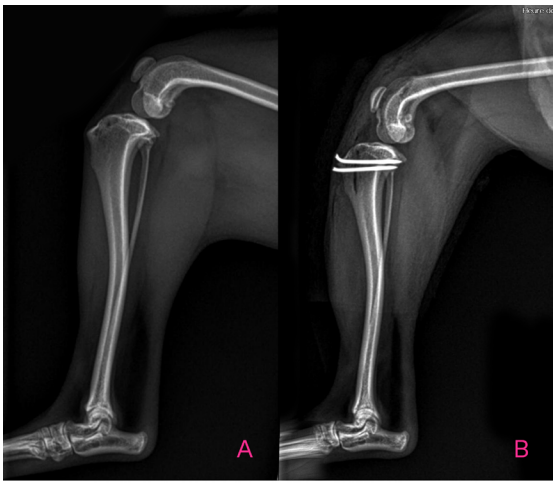

Figure 1
A) Medio-lateral radiograph of the knee of a patient with a luxating patella
B) Medio-lateral radiograph of the knee of a surgically fixed patient

Surgery aims to realign the knee's extensor mechanism and ensure that the patella is in a normal **anatomical position.**
The surgical steps to achieve these goals are:

1) Trochleoplasty, which deepens the femoral trochlea
2) Tibial crest transposition
3) Imbrication or relaxation of the medial and lateral knee compartment tissues

Block trochleoplasty helps **preserve knee cartilage**, unlike direct trochleoplasty, which will permanently damage the cartilage.

In certain specific cases, **both knees can be operated on simultaneously.** The risk of complications is slightly higher than when the two knees are operated on separately. Recovery is slightly more difficult for the patient during the first postoperative week. The complete two-month rest period must be strictly followed to limit the risk of complications. There is an advantage for the patient, who will only go through one postoperative period, and for the owners, as the costs of a second procedure are avoided.

PROGNOSIS

The surgical prognosis is excellent when patellar luxation correction is performed by a surgeon who has completed a residency in surgery with the ACVS (American College of Veterinary Surgeons) or the ECVS (European College of Veterinary Surgeons).

Since cats are also athletes, they benefit from surgery as much as dogs do compared to non-surgical alternatives.

There are knee orthotics available for patellar luxation. However, their effectiveness has not been studied and remains uncertain.

RISKS OF COMPLICATIONS

The most common complications of surgical correction of patellar luxation are seromas (3%), recurrence of luxation (3-10%), and, in rare cases, implant failure (<1%).

- **Seroma**
  Seromas can develop within the first few weeks after surgery or even several months later. Clinical signs associated with seromas include lameness, an abnormal wound appearance (redness, swelling, discharge, etc.), and discomfort when palpating the implants.

  When a seroma is associated with surgical implants, **implant removal** is necessary in most cases. Removing the implants once bone healing is complete does not affect the prognosis since the bone has already healed. If the seroma is diagnosed before the scheduled follow-up two months after surgery, anti-inflammatory medications will be prescribed until bone healing is achieved.

- **Recurrence of Luxation**
  In most cases of recurrent luxation, the definitive treatment will involve **returning to surgery.** Initially, it is possible to put the patient on rest and wait for joint inflammation to decrease, allowing the tissues to heal.

- **Implant Failure**
  This complication is **rare** and generally occurs when recommendations for complete rest are not followed.

FOLLOW-UPS

Bone healing is completed after 2 months of complete rest in the majority of patients. The patient will recover during this period, so it is normal for there to be a slight lameness of the operated limb until the radiographic follow-up. This lameness should gradually improve throughout the healing period. If deterioration is noted, prompt follow-up with your veterinarian or at an emergency center is indicated.

Two follow-ups are generally sufficient to ensure the adequate progression of the surgery.

- **The first follow-up** scheduled **2 weeks after surgery** involves assessing the patient's gait, the progression of wound healing, and if adequate, removing the sutures.

- **The second follow-up** scheduled **2 months after surgery** involves evaluating the patient's gait, palpating the stability of the knee and kneecap, and performing knee radiographs under deep sedation. At this follow-up, 2 radiographic views will be taken and sent to Coupez for the evaluation of bone healing.

Rehabilitation will be completed 4 months after surgery. The patient should no longer be limping at this stage. If this is the case, follow-up is indicated.

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